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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,288	05/25/2001	Mamoru Ueda	450100-03378	4611

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FROMMER LAWRENCE & HAUG  
745 FIFTH AVENUE- 10TH FL.  
NEW YORK, NY 10151

EXAMINER
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SHIBRU, HELEN

ART UNIT	PAPER NUMBER
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2621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/04/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/866,288

Applicant(s)

UEDA, MAMORU

Examiner

HELEN SHIBRU

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 13 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 and 29-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 and 35 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-10, 29-34, and 36-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/13/2006 has been entered.

***Response to Amendment***

2. The amendments filed on 12/13/2006 have been entered and made of record. Claims 11-28 are previously cancelled and claims 1-10 and 29-42 are pending. In view of the Applicants' amendments to claims 7 and 35 the objection to claims 7 and 35 is hereby withdrawn.

***Response to Arguments***

3. Applicant's arguments with respect to claims 1-6, 8-10, 29-31, 32-34 and 36-42 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 4, 6, 8, 10, 29-32, 34, 36, 38-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ngai (6,263,023) in view of Salem (US Pat. No. 5,623,615) and further in view of Emura (US Pat. No. 6,848,117).

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Regarding claim 1, Ngai discloses a decoding apparatus for decoding a coded stream, comprising:

input means (input (22) in fig. 1) for inputting a speeded-up coded stream (see col. 3 line 66- col.4 lines 19, it is inherent that the video data from the DVD drive are speeded-up to accept the data at the requested rate and the memory (14) stores the data at the rate at which it is received. The received rate varies i.e. one rate is higher or lower than the other one. See also col. 5 lines 27-30. The size of the FIFO depends on the speed of the incoming data);

a plurality of decoding means (see slice decoder (16) in fig. 1) for decoding said speeded-up coded stream comprising a plurality of coded streams (see col. 4 lines 28-32 and figure 3);

decoding control means (see fig. 1 stream slicer (18)) for controlling said plurality of decoding means such that said plurality of decoding means operate in parallel (see col. 4 lines 32-44 and connection (28) in fig. 1); and

output control means (see fig. 1 synchronizer (20)) for outputting, a picture corresponding to each of said plurality of coded streams of said speeded-up coded stream decoded by said plurality of decoding means (see col. 4 lines 48-55. High level symbols which may apply to all slices in a video stream are stored in one or more symbol registers. Symbols represent encoded parameters used in decoding a video stream. See col. 5 lines 27-53)).

Claim 1 differs from Ngai in that the claim further requires a plurality of decoding controls.

In the same field of endeavor Salem discloses a plurality of decoding controls (see figure 4 components 128a and b and col. 6 lines 57-66). Salem further discloses the control unit (component 110 in fig. 4) allows decoding of the instructions and all other operations required by

the ROM (see col. 7 lines 4-14). Salem further discloses parallel decoders are located within the instruction decoders attempt to decode and issue two instructions (see col. 8 lines 12-19).

Therefore in light of the teaching in Salem it would have been obvious to one of ordinary skill in the art at the time the invention was made to add another decoding control means in order to manage the sequence of operations that must be performed to implement the processor architecture in accordance with ROM.

Claim 1 further differs from Ngai and Salem in that the claim further requires outputting a picture at an arbitrary playback speed.

In the same field of endeavor Emura discloses a stream control section for determining a keyframe readout interval that satisfy a playback speed. The terminal apparatus (see fig. 1 decodes and displays the transmitted stream at the received keyframe interval and the system can correctly perform a playback at an arbitrary speed that is designated by the terminal apparatus (see abstract and col. 17 line 61-col. 18 line 7). Therefore in light of the teaching in Emura it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the proposed combination of Ngai and Salem by outputting a picture at an arbitrary playback speed in order to playback data with the characteristics of a stream.

Regarding claim 2, Ngai discloses speeded-up coded stream is an MPEG-2 video bit stream having a bit rate increased by a predetermined factor (see col. 4 lines 5-19 and col. 5 lines 27-3. it is inherent that the rate has an original factor which is increased by a predetermined factor).

Regarding claim 4, Ngai discloses decoding means outputs a signal indicating completion of decoding to said decoding control means (see col. 5 lines 10-19), and

said decoding control means controls said decoding means which has output said signal indicating the completion of decoding such that said decoding means decodes another coded stream (see col. 5 lines 19-26).

Regarding claim 6, Ngai discloses selection means (see fig. 2 busy (68) and busy circuit (56)) for selecting a particular one of a plurality of picture data decoded and output by said plurality of decoding means (see col. 5 lines 10-19); and compensation (see motion compensation (52) in fig. 2) means which receives the picture data selected by said selection means and performs motion compensation, as required, upon the received picture data (see col. 4 lines 65-col. 5 line 5).

Regarding claim 8, Ngai discloses storage means (frame buffer (50)) for said selection means or motion compensation performed by said motion compensation means (see col. 4 line 65- col. 5 line 5); and storage control means (processor (96)) for controlling the storage, in said storage means, of said picture data selected by said selection means or said picture data subjected to motion compensation performed by said motion compensation means (see col. 5 lines 3-5 and 39-43 it is inherent that frame buffer (50) is controlled by stream processor (96) in conjunction with slice address allocator (98) and busy signal (68)).

Regarding claim 10, the limitation of claim 10 can be found in claim 1. Therefore claim 1 is analyzed and rejected for the same reason as discussed in claim 1 above.

Regarding claim 29, Ngai discloses a plurality of decoding means comprise a plurality of slice decoders (see figure1 SLICE DECODER (16) and claim 1 rejection above).

Regarding claim 30, the limitation of claim 30 can be found in claim 1. Therefore claim 30 is analyzed and rejected for the same reason as discussed in claim 1 above.

Claim 31 is rejected for the same reason as discussed in claim 2 above.

Regarding claim 32, Ngai discloses decoding means outputs a signal indicating completion of decoding to said decoding control means (see col. 5 lines 10-19), and said decoding control means controls said decoding means which has output said signal indicating the completion of decoding such that said decoding means decodes another coded stream (see col. 5 lines 19-26).

Claim 34 is rejected for the same reason as discussed in claim 6 above.

Claim 36 is rejected for the same reason as discussed in claim 8 above.

Regarding claim 38, Ngai discloses acceptance means for accepting a multiplexed stream on which said plurality of coded streams are multiplexed (see col. 4 lines 12-14); and supply means for separating said multiplexed stream into the plurality of coded streams and supplying said plurality of coded streams to said input means (see col. 3 line 65-col. 4 line 15).

Regarding claim 39, Ngai discloses plurality of decoding means comprise a plurality of slice decoders (see figure1 SLICE DECODER (16) and claim 1 rejection above);

said output control means is operable to output a plurality of pictures corresponding to said plurality of coded streams decoded by said plurality of slice decoders (see fig. 1 synchronizer (20), col. 4 lines 48-55, col. 5 lines 27-53 and claim 1 rejection above).

Regarding claims 40-42, the limitations of claims 39-42 can be found in claim 1 above. Therefore claims 40-42 are analyzed and rejected for the same reason as discussed in claim 1 above.

6. Claims 5 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ngai in view of Salem (US Pat. No. 5,623,615) further in view of Akiwumi-Assani (US Pat. No. 5,532,744).

Claim 5 differ from the proposed combination of Ngai and Salem in that the claim further requires first buffer means for buffering said speeded-up coded stream; reading means for reading from said speeded-up coded stream a start code indicating the start of a predetermined unit of information included in said speeded-up coded stream and further reading position information indicating a location in said buffer means at which said start code is stored; second buffering means for buffering said start code and said position information read by said reading means; and buffering control means for controlling buffering of said speeded-up coded stream by said first buffering means and buffering of said start code and said position information by said second buffering means. However Ngai discloses first buffer means(see fig. 1 memory (14)) for buffering said speeded-up coded stream (see col. 4 lines 14-19). Ngai also teaches the start address allocated the address of the slices and a data stream is route to a start code detector (92 in fig. 3 and see col. 5 lines 31-35).

In the same field of endeavor Akiwumi-Assani discloses first buffer means (rate buffer (20) in fig. 1) for buffering said coded stream (see col. 4 lines 55-58, col. 5 lines 24-32); reading means (system controller (24) in fig. 1) for reading from said coded stream (see col. 4 lines 55-58) a start code indicating the start of a predetermined unit of information (see col. 4 line 66-col. 5 line 7) included in said coded stream and further reading position information indicating a location in said buffer means at which said start code is stored (see col. 5 line 7-12 and 20-24); second buffering means (decoder module (12) in fig. 1) for buffering said start code and said



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position information read by said reading means (see col. 4 lines 16-20, col. 5 lines 13-15, 33-38 and 49-65, the start code information is route to the decoder module (12) which comprises buffer); and buffering control (see system controller (24) in fig. 1) for controlling buffering of said coded stream by said first buffering means (see col. 5 lines 30-32) and buffering of said start code and said position information by said second buffering means (see col. 5 lines 7-15 and line 66-col. 6 line 5). Therefore in light of the teaching from Akiwumi-Assani it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Ngai by having a coded stream unit in order to indicate the beginning of each portion of the picture area.

Claim 33 is rejected for the same reason as discussed in claim 5 above.

7. Claims 9 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ngai in view of Salem (US Pat. No. 5,623,615) and further in view of Phillips (US Pat. No. 5, 510, 842).

Regarding claim 9, claim 9 differs from the proposed combination of Ngai and Salem in that the claim further requires storage means stores a luminance component and a color difference component of said picture data separately from each other. Although Ngai does not disclose storage means stores a luminance component and a color difference component of said picture data separately from each other, Ngai discloses high level symbols can be sent to the slice decoders (see col. 5 lines 42-53).

In the same field of endeavor Phillips discloses each macroblocks of pixel values includes luminescence and color signals (see col. 6 lines 56-65). Phillips further discloses the interpolation filter expands the image to fit the aspect ratio (see col. 7 lines 14-26). Phillips further discloses the output signals are luminescence and color difference signal (see col. 10 line

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66- col. 11 line 5). Therefore in light of the teaching in Phillips it would have been obvious to further modify Ngai by storing a luminescence component and a color difference component in order to produce different samples on the receiver's display device.

Claim 37 is rejected for the same reason as discussed in claim 9 above.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ngai in view of Salem and further in view of Official Notice.

Regarding claim 3, although Ngai does not specifically disclose output control means outputs a picture corresponding to said MPEG-2 video bit stream having the bit rate increased by the predetermined factor, at a playback speed increased by a factor within the range from zero to a predetermined value, Ngai discloses output control means (see fig. 1 synchronizer (20)) outputs a picture corresponding to said MPEG-2 video bit stream having the bit rate increased by the predetermined factor (see col. 4 lines 5-19 and/or claim rejection 2 above). Official Notice is given that it is well known in the art to increase the play back speed (trick play) to a predetermined factor. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ngai by providing a playback speed increased by a factor within the range from zero to a predetermined value in order to traverse the data.

In page 16 of the argument the Applicant requests an evidence to support the Official Notice. In response the Examiner provides Lane et al. (US Pat. No. 5,377,051). Lane discloses fast forwarding and reverse operation to a predetermined factor (see fig. 13(b) 9X, and 3X).

***Allowable Subject Matter***

9. Claims 7 and 35 are allowed.

*Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Van Thong et al. (US Pat. No. 6,505,153)

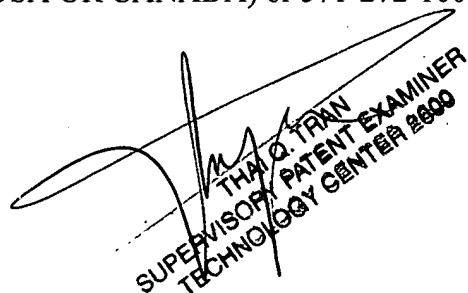
Wakimoto et al (US PG PUB 2003/0095789)

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELEN SHIBRU whose telephone number is (571) 272-7329. The examiner can normally be reached on M-F, 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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